Chip Series

1. High insulation resistance
2. Low capacitance (≤1.0pF)
3. 6KA , 5KA 8/20μs maximum surge current capacity in accordance with IEC61000-4-5
4. 6KV 10/700μs maximum surge rating in accordance with ITU-TK.21
5. Surface mounted gas arrester
6. Micro-Gap Design
7. Size 6.2x6.2x4.2mm
8. Storage and operating temperature: -40℃ ~ +85℃
9. Meets MSL level 1, per J-STD-020
10. Safety certification: E221527

Applications

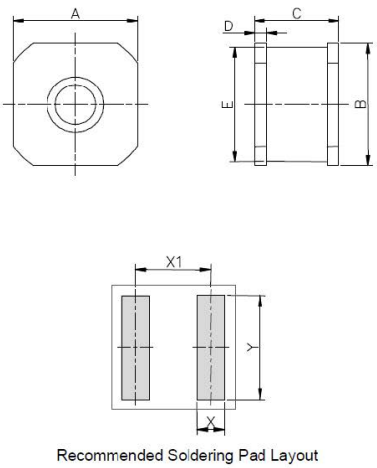
1. Repeaters, Modems
2. Telephone Interface, Line cards
3. Data communication equipment
4. Line test equipment

How to Order

WTG D 801 N - 626242

- **626242** → **Dim 6.2x6.2x4.2mm**
- **N** → **Tolerance of DC Spark-Over Voltage ±20%**
- **801** → **DC Breakdown Voltage 800V 80x10[1]**
- **D** → **5KA**
- **WTG** → **WPMtek Logo**

Drawing



Recommended Soldering Pad Layout

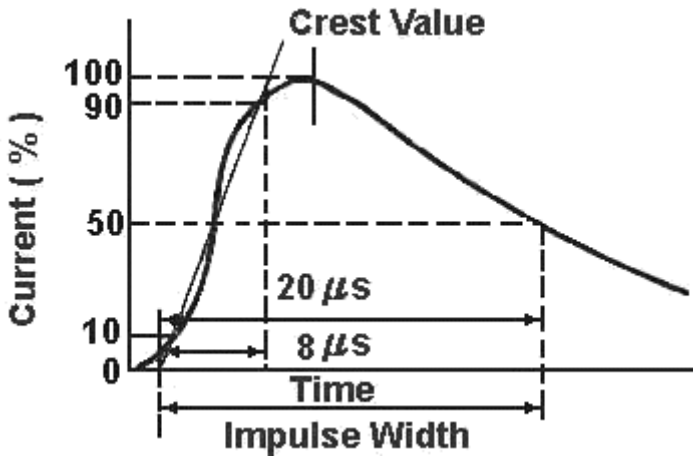
Symbol	Millimeters	Inches
A	6.2±0.2	0.244±0.008
B	6.2±0.2	0.244±0.008
C	4.2±0.3	0.165±0.012
D	0.6±0.1	0.024±0.004
E	Φ6±0.1	Φ0.236±0.004
X	1.3	0.051
X1	3.5	0.138
Y	7.0	0.276

Electrical Specification

Model	DC Breakdown Voltage 100/s	Impulse Spark-over Voltage 1KV/μS MaX V	Impulse Discharge Current @ 8/20μs		AC Discharge Current @50Hz 1S	Insulation Resistance	Capacitance (1MHz)	Impulse Life @ 10/1000μs 100A
			Nominal ±5times KA	Max 1time KA	Nominal 5 times	Min GΩ	Max. pF	Min Times
WTGD750N-626242	75V±20%	600	5	6	5	1GΩ Min (DC25V)	1 pF Max.	300
WTGD900N-626242	90V±20%	600	5	6	5	1GΩ Min (DC50V)		300
WTGD151N-626242	150V±20%	600	5	6	5			300
WTGD231N-626242	230V±20%	700	5	6	5	1GΩ Min (DC 100V)		300
WTGD301N-626242	300V±20%	800	5	6	5			300
WTGD351N-626242	350V±20%	850	5	6	5	1GΩ Min (DC 250V)		300
WTGD401N-626242	400V±20%	900	5	6	5			300
WTGD471N-626242	470V±20%	900	5	6	5			300
WTGD601N-626242	600V±20%	1000	5	6	5			300
WTGD801N-626242	800V±20%	1500	5	6	5			300

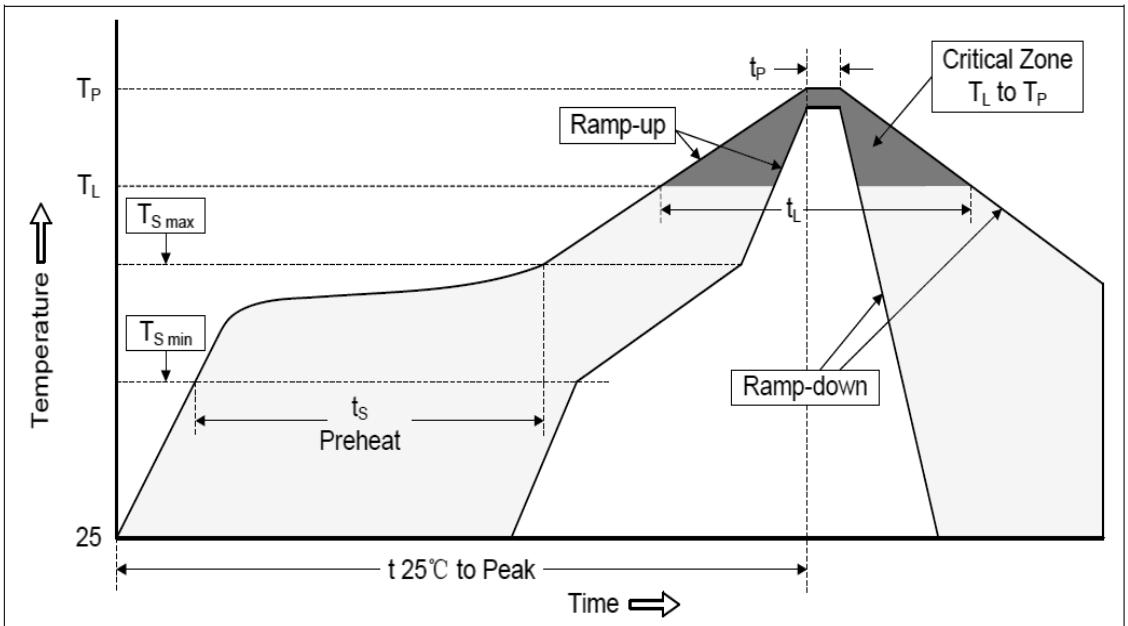
Note: Glow Voltage at 10mA……~60V
Arc Voltage at 1A ……~10V
Glow to Arc transition Current ……..~0.3A
Weight …….. 0.62g

Electrical Rating

Item	Test Condition / Description	Requirement
DC Breakdown Voltage	The voltage is measured with a low rate of rise dv / dt ÷ 100 v/s	To meet the specified value
Maximum Impulse	The maximum impulse breakdown voltage is measured with a rise time of dv / dt ÷ 1000 v/μs	
Breakdown Voltage Maximum Impulse Discharge Current	The maximum current within gas tube voltage change of ±20% when one impulse is applied. Applied waveform : 8/20μsec 	
DC Holdover Voltage	The maximum DC voltage across the two terminals of gas tube under which it may be expected to return to the high impedance state after the gas tube breakdown.	
Insulation Resistance	The resistance of gas tube shall be measured each terminal to each other terminal.	
	Applied voltage: gas tube dc breakdown voltage under 150V, the test voltage is 50V dc; with all other types at 100V dc.	
Capacitance	The capacitance of gas tube shall be measured each terminal to each other terminal. Test frequency : 1 MHZ	
	In measurements involving 3-electrode gas tubes ,the terminal not being tested shall be connected to a ground plane.	

Recommended Solder Conditions

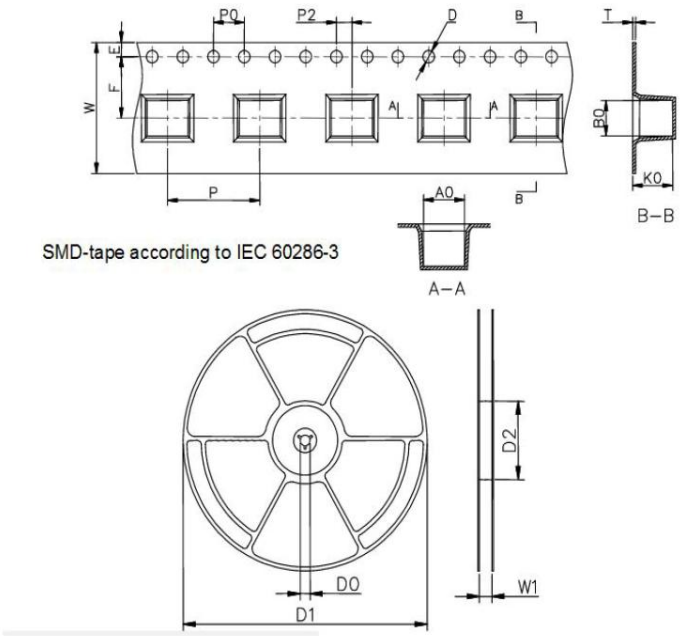
Reflow Soldering



Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3℃/second max.
Preheat -Temperature Min ($T_{S\,min}$) -Temperature Max ($T_{S\,max}$) -Time (min to max) (ts)	 150℃ 200℃ 60-180 seconds
$T_{S\,max}$ to T_L -Ramp-up Rate	 3℃/second max.
Time maintained above: -Temperature (T_L) -Time (t_L)	 217℃ 60-150 seconds
Peak Temperature (T_P)	260℃
Time within 5℃ of actual Peak Temperature (t_P)	20-40 seconds
Ramp-down Rate	6℃/second max.
Time 25℃ to Peak Temperature	8 minutes max.

Packaging

One reel with 800pcs



Symbol	Millimeters	Inches
W	16±0.3	0.630±0.012
A0	4.6±0.1	0.181±0.004
B0	6.5±0.1	0.17±0.004
K0	6.7±0.1	0.256±0.004
P	12±0.1	0.472±0.004
F	7.5±0.1	0.295±0.004
E	1.75±0.1	0.069±0.004
D	1.5+0.1/-0.0	0.059+0.004/-0.0
P0	4±0.1	0.157±0.004
P2	2±0.1	0.079±0.004
T	0.5±0.1	0.020±0.004
D0	13.3±0.15	0.524±0.006
D1	330±2	12.992±0.079
D2	100+1/-2	3.937+0.039/-0.079
W1	16.5±0.4	0.65±0.016